What is claimed is:

1. A rear projection display comprising:

a screen;

a light source lamp for emitting a light;

a light-modulating section for modulating the light emitted from the light source lamp to a light for displaying a display screen on the screen;

an auxiliary lamp that is higher in a rate of increase in luminance at a start of illumination than the light source lamp, and arranged such that a light emitted from the auxiliary lamp can reach a rear surface side of the screen without passing through the light-modulating section; and

a control section that causes both of the light source lamp and the auxiliary lamp to illuminate at power on, and causes the auxiliary lamp to extinguish before luminance of the light source lamp reaches a luminance level high enough to cause the display screen to be displayed on the screen by projection.

2. A rear projection display comprising:

a screen;

a light source lamp for emitting a light;

a light-modulating section for modulating the light emitted from the light source lamp to a light for displaying a display screen on the screen;

an auxiliary lamp that is higher in a rate of increase in luminance at a start of illumination than the light source lamp, and arranged such that a light emitted from the auxiliary lamp can reach a rear surface side of the screen without passing through the light-modulating section; and

a control section that causes both of the light

source lamp and the auxiliary lamp to illuminate at power on, and causes the auxiliary lamp to extinguish after luminance of the light source lamp reaches a luminance level high enough to cause the display screen to be displayed on the screen by projection.

3. A rear projection display as claimed in claim 1, wherein the control section progressively reduces the luminance of the auxiliary lamp from a time when the auxiliary lamp has been lighted to a time when the auxiliary lamp is extinguished.

4. A rear projection display as claimed in claim 2, wherein the control section progressively reduces the luminance of the auxiliary lamp from a time when the auxiliary lamp has been lighted to a time when the auxiliary lamp is extinguished.